

LISTING OF CLAIMS

1. (Currently Amended) A system for checking the position and/or the dimensions of mechanical pieces, ~~[[including]]~~ comprising:

[[•]] a checking probe ~~[[4]]~~ with

[[•]] detecting devices ~~[[13]]~~,

[[•]] power supply devices ~~[[12]]~~,

[[•]] a logic unit ~~[[36]]~~,

[[•]] memory devices ~~[[37,38]]~~ adapted for storing ~~[[the]]~~ a value of at least one operation parameter of the checking probe ~~[[4]]~~, and

[[•]] a remote transceiver unit ~~[[8]]~~ for ~~[[the]]~~ wireless transmission and reception of signals,

[[•]] a base transceiver unit ~~[[10]]~~ for the wireless transmission and reception of signals to and from said remote transceiver unit ~~[[8]]~~,

[[•]] a display device ~~[[22]]~~ adapted for displaying, on the basis of signals received from the remote transceiver unit ~~[[8]]~~, information regarding said at least one parameter and an associated value, and

[[•]] a manually-operated control device ~~[[11]]~~, connected to the base transceiver unit ~~[[10]]~~ and adapted for generating, upon an operator's manual control, control signals and for transmitting said control signals by means of the base transceiver unit ~~[[10]]~~, said logic unit ~~[[36]]~~ of the checking probe ~~[[4]]~~ being adapted for selecting the value of said at least one operation parameter in response to controls ~~[[C1,C2]]~~ received by means of the remote transceiver unit ~~[[8]]~~ and to provide signals indicative of said at least one parameter and of the associated value,

[[characterized in that]] wherein the logic unit ~~[[36]]~~ is adapted to provide, in response to the received controls ~~[[C1,C2]]~~, signals indicative of a current selectable value out of two or more selectable values, the display device ~~[[22]]~~

displaying said current selectable value of said at least one parameter, said control signals generated and transmitted by the manually operated control device [(11)] being adapted to control the logic unit [(36)] of the checking probe to update the value of said at least one operation parameter and, on the basis of information in the display device [(22)], confirm said value.

2. (Currently Amended) The system according to claim 1, wherein said display device [(22)] is connected to the base transceiver unit [(10)], said indicative signals being wirelessly transmitted from the remote unit [(8)] to the base transceiver unit [(10)].

3. (Currently Amended) The system according to claim 2, wherein the manually-operated control device [(11)] includes said display device [(22)].

4. (Currently Amended) The system according to [[one of the preceding]] claim[[s]] 1, including an interface unit [(11)], connected to said base transceiver unit [(10)], that includes said manually-operated control device [(11)].

5. (Currently Amended) The system according to claim 4, wherein said remote transceiver unit [(8)] and said base transceiver unit [(10)] define a single wireless two-way communication link [(14)].

6. (Currently Amended) The system according to claim 5, wherein the remote transceiver unit [(8)] is adapted for transmitting by means of said single wireless two-way communication link [(14)] detection signals generated in the checking probe [(4)] by the detecting devices [(13)].

7. (Currently Amended) The system according to claim 5 [[or claim 6]], wherein the base transceiver unit [[(10)]] is adapted for transmitting by means of said single wireless two-way communication link [[(14)]] signals for activating the checking probe [[(4)]] on the basis of signals generated in the interface unit [[(11)]].

8. (Currently Amended) The system according to [[one of the preceding]] claim[[s]] 1, wherein said remote unit [[(8)]] and said base transceiver unit [[(10)]] are of the]] communicate using radio-frequency [[type]].

9. (Currently Amended) The system according to claim 8, wherein each of said base transceiver unit [[(10)]] and said remote transceiver unit [[(8)]] includes an antenna [[(30)]].

10. (Currently Amended) The system according to claim 8 [[or claim 9]], wherein said at least one operation parameter of the checking probe [[(4)]] is the transmission frequency of the remote transceiver unit [[(8)]].

11. (Currently Amended) The system according to [[one of the preceding]] claim[[s]] 1, wherein said memory devices include a temporary register [[(37)]] and a non-volatile memory [[(38)]].

12. (Currently Amended) The system according to [[one of the preceding]] claim[[s]] 1, wherein said manually-operated control device [[(11)]] includes at least one key [[(20,21)]] and is adapted for generating said control signals in response to manual activation of said at least one key by the operator.

13. (Currently Amended) The system according to [[one of the preceding]] claim[[s]] 1, wherein said manually-operated control device [[(11)]] includes two keys [[(20,21)]] and is adapted for generating said control signals in response to manual activation of said two keys [[(20,21)]] by the operator.

14. (Currently Amended) The system according to [[one of the preceding]] claim[[s]] 1, for the checking of mechanical pieces in a machine tool [[(2)]], wherein the checking probe is a contact detecting probe [[(4)]] and the detecting devices include a microswitch [[(13)]].

15. (Currently Amended) A method for selecting [[the]] a value of at least one operation parameter in a system for checking the position and/or the dimensions of mechanical pieces, the system comprising [[including]] a checking probe [[(4)]] with a logic unit [[(36)]], memory devices [[(37,38)]], and a remote transceiver unit [[(8)]] for [[the]] wireless transmission and reception of signals, a base transceiver unit [[(10)]] for the wireless transmission and reception of signals to and from said remote transceiver unit [[(8)]], a display device [[(22)]], and a manually-operated control device [[(11)]] connected to said base transceiver unit [[(10)]], the method [[including the following steps]] comprising:

[[-]] generating[[on]] in the logic unit [[(36)]], and transmitting[[ssion (46)]] to the display device [[(22) of]] signals indicative of said at least one operation parameter and of an associated current selectable value,

[[-]] displaying [[(48)]] in the display device [[(22)]], on the basis of said indicative signals, [[of]] information regarding said at least one operation parameter and associated current selectable value, and

[[-]] generation [[(52,56)]], in the manually-operated control device [[(11)]], and transmitting[[ssion]] from the base unit [[(10)]] to the remote transceiver unit,

[(8) of]] control signals controlling the logic unit [(36)], [[the method being characterized in that said signals generated in the logic unit (36) and transmitted to the display device (22) are indicative of a current selectable value of said at least one operation parameter,]] said control signals being generated in response to a control manually provided by an operator on the basis of information displayed on the display device [(22)], and corresponding to an updating control [(C1)] or a confirmation control [(C2)] of the current selectable value, said control signals controlling the logic unit [(36)] to update [(54)] or confirm [(58,62)] the value of said at least one operation parameter.

16. (Currently Amended) The method according to claim 15, wherein [[in a system in which]] said display device [(22)] is connected to the base transceiver unit [(10)], and wherein said transmission [(46)] of the indicative signals occurs wirelessly, from the remote transceiver unit [(8)] to the base transceiver unit [(10)].

17. (Currently Amended) The method according to claim 15 [[or claim 16]], further comprising:

[[for]] selecting [[the]] a value of two or more operation parameters of a system in which said memory devices [(37,38)] include a temporary register [(37)], and

[[the method including the]] storing in said temporary register [(37) of]] the current selectable value of each of said two or more operation parameters, as a consequence of the generating[[on]] step [(56), in the manually-operated control device (11), of control signals corresponding to the confirmation controls (C2)].

18. (Currently Amended) The method according to claim 17, in a system in which said memory devices [(37,38)] further include a non volatile memory [(38)], the method [[including the following]] further [[steps]] comprising:

[[-]] generating[[on (72)]], in the manually-operated control device [(11)] in response to a control manually provided by an operator, [[of]] control signals corresponding to confirmation controls [(C2)] of [[the]] selections made, and transmitting[[ssion of]] said control signals from the base transceiver unit [(10)] to the remote transceiver unit [(8)], and

[[-]] storing[[age (76)]] in the non-volatile memory, [(38) of]] the values selected and stored in said temporary register [(37)].

19. (Currently Amended) The method according to claim 18, wherein [[in a system in which]] said remote transceiver unit [(8)] and said base transceiver unit [(10)] are of the radio-frequency type, and wherein one of said two or more operation parameters of the system is [[the]] a transmission and reception frequency of the remote transceiver unit [(8)].